# Shipping Samples to SMC Water Quality Lab



## So you've collected your water samples...









Make sure samples are properly labeled!

## So you've collected your water samples...

#### **Return to School:**

Freeze small nutrient bottles (125mL)





Refrigerate large TSS bottles (1L)



## Shipping Samples from Vermont

### Step 1:

- Contact Katie to tell her that you need to ship samples (<u>kchang@smcvt.edu</u>) and give her an approximate weight
- Katie will create a UPS Shipping Label and email it to you

#### UPS Internet Shipping: View/Print Label

- 1. Ensure that there are no other tracking labels attached to your package.
- Fold the printed label at the solid line below. Place the label in a UPS Shipping Pouch. If you do not have a pouch, affix the folded label using clear plastic shipping tape over the entire label.
- 3. GETTING YOUR SHIPMENT TO UPS

Customers without a Daily Plokup

- Schedule a same day or future day Pickup to have a UPS driver pickup all of your internet Shipping packages
- Hand the package to any UPS driver in your area.
- Take your package to any location of The UPS Store<sup>®</sup>, UPS Drop Box, UPS Customer Center, UPS Alliances (Office Depot<sup>®</sup> or Staples<sup>®</sup>) or Authorized Shipping Outlet near you. Kems sent via UPS Return Services<sup>SM</sup> (Including via Ground) are also accepted at Drop Boxes.
- To find the location nearest you, please visit the 'Find Locations' Quick link at ups.com.

#### Customers with a Dally Plokup

Your driver will pickup your shipment(s) as usual.

#### FOLD HERE



### Step 2:

Print out the prepaid UPS shipping label

### Step 3:

- Put all the water samples (may include soil samples too) inside a ThermoSafe cooler
- Add 4-5 frozen cold packs in Ziploc bags



### Step 4:

- Seal the box with packing tape
- Tape UPS Return label to the top of the box

### Step 5:

 Take the box to your local UPS store for delivery to SMC



Notify Katie through email

Shipment of Water Samples to SMC Water Quality Laboratory

UPS Internet Shipping View/Print Label

UEs internet Shipping View/Print Label

Consider a contact of the conta

3.

Put all samples inside a **ThermoSafe** cooler box along with 4-5 frozen cold packs



5. UPS

Bring the box to your local UPS Store for delivery to SMC

Tape UPS
Return Label
to the top

# Shipping Samples from Puerto Rico

Take unsealed package to UPS and ship to:

VT EPSCOR RACC

Attn: Katie Chang

Cheray 126

One Winooski Park Box 137

Colchester, VT 05439

 No longer able to charge shipments to EPSCoR Account #

# Questions???



# Using the iButton





# Download iButton Software

- http://www.maximintegrated.com/products/i button/software/tmex/download drivers.cfm
  - Called One Wire Viewer
  - free
  - Not for Macs



# Connecting iButton to Computer







# Connecting iButton to Computer



Flat side of iButton towards engraved "i"





# How to Take out the iButton from the USB Shuttle





### ton Software - demo

- Prompt for USB port
- Software interface overview
- Programming iButton (Start a Mission)

#### Sensor Field Data Sheet 2014-2015

Stream Name:	Site Code:
Investigators:	Date:

#### **Temperature Sensor**

A. Only applicable at deployment visit:

11. Oliv applicable at acployment visit.	
Serial Number	
Time Interval	120 mins
Initial Program Launch Date and Time	
Deployment Date and Time	
Retrieval Date and Time	
Name of .csv data file	

B. <u>Field Notes performed every 2-3 weeks</u> : Sign of damage or disturbance? Is the sensor buried in sand or covered with debris or fouled with al		
Is the sensor dewatered?		

#### Stage Sensor

Serial Numbers	
Total Depth at Sensor	
Depth from Stream Bottom to Sensor	
Depth from Stream Surface to Sensor	

Sign of damage or disturbance? Is the sensor buried in sand or covered with debris or fouled with algae	gae?
Is the sensor dewatered?	

Other Comments: ( map, problems, observations, etc)



# Install in stream and wait...



- Check on iButton every 2-3 weeks and fill out Sensor Field Data Sheet
- Remove at end of field season



# Downloading iButton Data - demo

- 1. Connect iButton to computer
- 2. View graph of data
- 3. Save, Export, and Email Data



## **Using Data**

Right-click on graph to save:

Copy Data to Clipboard (comma-separated)
Copy Data to Clipboard with Labels
Copy Data to Clipboard without Labels
Save Data to .csv File
Rescale Graph

When naming file, include: Site Code

Example:

LCD\_BrtltBrk\_139.csv

- Email .csv files to Katie with subject line of: "High School temp"
- Open in Excel!



# Questions???



Picture Credit: Rick Levey, VT DEC



### **Site Selections**



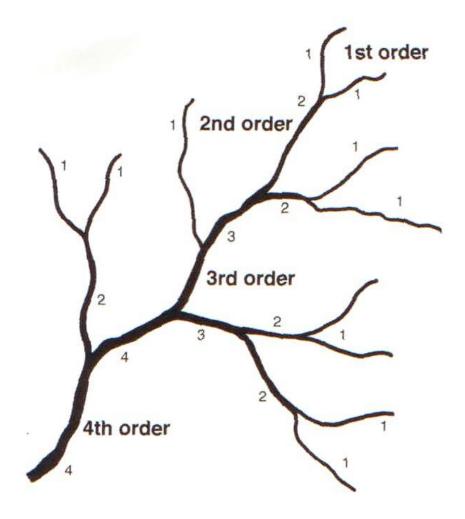


### Stream Sites Criteria

### Should be

- 2<sup>nd</sup> or 3<sup>rd</sup> order streams
- Have riffles (avoid slow meanders)
- Easy access (landowner permission)
- Consider land use (contrasting sites)







### **Procedure for New Sites:**

- 1. Explore your area in Google Earth or Google Maps or Atlas (now)
- 2. Explore sites in person!
- Meet CWDD staff at site to confirm and collect latitude and longitude with GPS unit
- 4. Wait and receive site code, percentages of land use, and watershed kml file in email
- Do not start sampling until you have received your site code!



## **Always** Use Site Codes!

Site Code = LCD\_EngBrk\_117

### **Translation:**

- Lake Champlain Direct
- Englesby Brook
- Elevation 117ft



### Now:

- Explore your watershed and the stream sites map: http://www.uvm.edu/~epscor/new02/?q=node/
- Or on Google Earth, Google Maps, VT Atlas, paper atlas
- Check out the database: www.uvm.edu/epscor/redir/streamsprojectdata
- Schedule a site visit with Katie
- Update Shipping Address on Katie's document